

Male with an internal subgular vocal sac, and black uuptial excrescences on the inner finger.

From snout to vent 67 millim.

Three specimens from Faro Island.

EXPLANATION OF PLATE XXVIII.

Fig. 1. *Lepidodactylus woodfordi*, p. 334.

1 a. ———. Lower view of foot; multiplied 3 times.

2. *Typhlops aluensis*, p. 336. Upper view of head; multiplied 4 times.

2 a. ———. Side view of head; multiplied 4 times.

2 b. ———. Lower view of head; multiplied 4 times.

2 c. ———. Lower view of tail.

3. *Batrachylodes vertebralis*, p. 337.

4. *Hyla lutea*, p. 337.

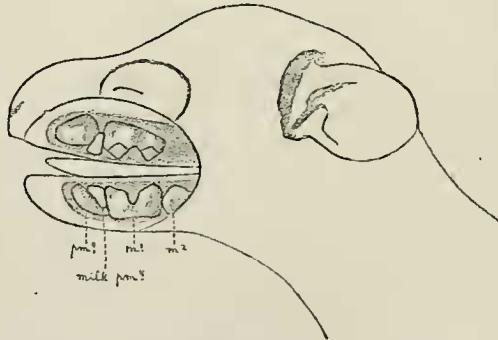
4. On the Milk-dentition of the Koala.

By OLDFIELD THOMAS.

[Received February 15, 1887.]

Among the few remaining Marsupials in which no trace of a milk-dentition has yet been found, the Koala (*Phascolarctos cinereus*) occupies a prominent place, especially as in this animal the last pre-molar, or pm.⁴, which among Marsupials is the only tooth that ever has a milk predecessor, is unusually large and powerful, and might have been therefore expected, as in the allied Phalangers, to have a proportionally well-developed predecessor.

At last, however, I have been able to find traces in the Koala of



Head of young Koala, showing milk-dentition; natural size.

just such a rudimentary milk-dentition as has been described in the Thylacine by Prof. Flower¹, and showing, just as in that animal, that the ancestors of the Koala have had, and that it has now lost, the ordinary amount of tooth-change found in the great majority of Marsupials.

In two very young and hairless Koalas, four and five inches long respectively, I find, on cutting open the side of the jaw, clear and

¹ Phil. Trans. 1867, p. 63.

distinct calcified milk-teeth, as shown in the accompanying drawing (fig. p. 338). Both above and below they lie in the groove on the outer side between the uncut pm.⁴ and m.¹, their summits being slightly above the level of these teeth, but yet not projecting above the gum. They are each about 4 millim. in length, the upper one with a conical root and thickened crown about 2 millim. in diameter, while the lower one is slenderer and has a proportionally longer root and smaller crown.

It is quite evident that these teeth never become functional, but are absorbed long before the animal is old enough to be able to use them, and in all probability they never cut the gum.

The discovery of milk-teeth in the Koala is of considerable interest when viewed in relation to their comparatively long persistence in the Phalangers on the one hand, and their entire absence, so far as is yet known, in the Wombats on the other, the Koala presenting in this, as in so many other characters, an intermediate condition between the two.

In this connection, however, it may be noted that throughout the Mammalia rootless-toothed animals do not have the same need of a functional milk-dentition as do rooted-toothed ones, owing to the manner in which the ever growing teeth are able to increase in size *pari passu* with the growth of the animal. No better example of this can be quoted than the case of the allied Rodent genera *Cavia* and *Dasyprocta*, the first having rootless premolars, whose milk-teeth are absorbed before birth, and the second having rooted premolars preceded by well-developed and long-persistent milk-teeth.

The bearing of this rule on our present subject is evident; for while the entire absence of milk-teeth was quite to be expected in the case of the rootless-toothed Wombats, their extreme state of reduction in the Koala is a most surprising fact, especially as there are in the latter animal no anterior premolars to make up during youth for the absence of milk-teeth, as there are in the Thylacine, in which a similar reduction of the milk-dentition has taken place.

5. On a new Gecko, of the Genus *Chondrodactylus*, from the Kalahari Desert. By G. A. BOULENGER, F.Z.S.

[Received March 3, 1887.]

Mr. J. J. Weir, F.Z.S., has handed over to me two small Lizards from the Kalahari, to be presented to the Natural History Museum in case they should prove of interest. Although unfortunately in a dry state, having been pinned in an insect-box, they are in comparatively good condition. One belongs to the well-known *Eremias lugubris*, Smith, the other represents a new Gecko of the genus *Chondrodactylus*, Peters, of which a single species was known, *C. angulifer*, Peters, also from South Africa. The discovery of a second species is therefore of great interest, and I have much pleasure in connecting with it the name of Mr. Weir.